Does Not Comply
Corrected Diskette Needed

OIPE

RAW SEQUENCE LISTING DATE: 02/13/2003
PATENT APPLICATION: **US/09/940,316B** TIME: 13:57:40

Input Set : **D:\30062-20026.txt**
Output Set: **N:\CRF4\02132003\I940316B.raw**

```
      3 <110> APPLICANT: KOSAN BIOSCIENCES, Inc.
      4       REEVES, CHRISTOPHER
      5       CHU, DANIEL
      6       KHOSLA, CHAITAN
      7       SANTI, DANIEL
      8       WU, KAI
     10 <120> TITLE OF INVENTION: POLYKETIDES ENCODING THE fkbA GENE OF THE FK-520 POLYKETIDE
SYNTHASE
     11       GENE CLUSTER
     13 <130> FILE REFERENCE: 30062-20026.11
     15 <140> CURRENT APPLICATION NUMBER: 09/940,316B
C--> 16 <141> CURRENT FILING DATE: 2003-02-05
     18 <150> PRIOR APPLICATION NUMBER: 09/410,551
     19 <151> PRIOR FILING DATE: 1999-10-01
     21 <150> PRIOR APPLICATION NUMBER: US 60/139,650
     22 <151> PRIOR FILING DATE: 1999-06-17
     24 <150> PRIOR APPLICATION NUMBER: US 60/123,810
     25 <151> PRIOR FILING DATE: 1999-03-11
     27 <150> PRIOR APPLICATION NUMBER: US 60/102,748
     28 <151> PRIOR FILING DATE: 1998-10-02
     30 <160> NUMBER OF SEQ ID NOS: 72
     32 <170> SOFTWARE: FastSEQ for Windows Version 4.0
```

ERRORED SEQUENCES

Misalignment of amino numbering throughout. Only errored portion of a sequence shown.

```
   4615 <210> SEQ ID NO: 21
   4616 <211> LENGTH: 1482
   4617 <212> TYPE: PRT
   4618 <213> ORGANISM: Artificial Sequence
   4620 <220> FEATURE:
   4621 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic PKS
   4622       synthase fragment
   4624 <400> SEQUENCE: 21
   4625 Gln Leu Ala Glu Ala Leu Leu Thr Leu Val Arg Glu Ser Thr Ala Ala
   4626   1               5                  10                  15
   4628 Val Leu Gly His Val Gly Gly Glu Asp Ile Pro Ala Thr Ala Ala Phe
   4629              20                  25                  30
   4631 Lys Asp Leu Gly Ile Asp Ser Leu Thr Ala Val Gln Leu Arg Asn Ala
   4632          35                  40                  45
   4634 Leu Thr Glu Ala Thr Gly Val Arg Leu Asn Ala Thr Ala Val Phe Asp
   4635      50                  55                  60
   4637 Phe Pro Thr Pro His Val Leu Ala Gly Lys Leu Gly Asp Glu Leu Thr
   4638  65                  70                  75                  80
```

RAW SEQUENCE LISTING DATE: 02/13/2003
PATENT APPLICATION: **US/09/940,316B** TIME: 13:57:40

Input Set : **D:\30062-20026.txt**
Output Set: **N:\CRF4\02132003\I940316B.raw**

```
4787 Ala Leu Ala His Leu Tyr Val Asn Gly Val Thr Val Asp Trp Pro Ala
4788 865                 870                 875                 880
4790 Leu Leu Gly Asp Ala Pro Ala Thr Arg Val Leu Asp Leu Pro Thr Tyr
4791                 885                 890                 895
4793 Ala Phe Gln His Gln Arg Tyr Trp Leu Glu Ser Ala Arg Pro Ala Ala
4794             900                 905                 910
4796 Ser Asp Ala Gly His Pro Val Leu Gly Ser Gly Ile Ala Leu Ala Gly
4797         915                 920                 925
4799 Ser Pro Gly Arg Val Phe Thr Gly Ser Val Pro Thr Gly Ala Asp Arg
4800     930                 935                 940
4802 Ala Val Phe Val Ala Glu Leu Ala Leu Ala Ala Ala Asp Ala Val Asp
4803 945                 950                 955                 960
4805 Cys Ala Thr Val Glu Arg Leu Asp Ile Ala Ser Val Pro Gly Arg Pro
4806                 965                 970                 975
4808 Gly His Gly Arg Thr Thr Val Gln Thr Trp Val Asp Glu Pro Ala Asp
4809             980                 985                 990
4811 Asp Gly Arg Arg Arg Phe Thr Val His Thr Arg Thr Gly Asp Ala Pro
4812         995                 1000                1005
4814 Trp Thr Leu His Ala Glu Gly Val Leu Arg Pro His Gly Thr Ala Leu
4815     1010                1015                1020
4817 Pro Asp Ala Ala Asp Ala Glu Trp Pro Pro Pro Gly Ala Val Pro Ala
4818 1025                1030                1035                1040
4820 Asp Gly Leu Pro Gly Val Trp Arg Arg Gly Asp Gln Val Phe Ala Glu
4821                 1045                1050                1055
4823 Ala Glu Val Asp Gly Pro Asp Gly Phe Val Val His Pro Asp Leu Leu
4824             1060                1065                1070
4826 Asp Ala Val Phe Ser Ala Val Gly Asp Gly Ser Arg Gln Pro Ala Gly
4827         1075                1080                1085
4829 Trp Arg Asp Leu Thr Val His Ala Ser Asp Ala Thr Val Leu Arg Ala
4830     1090                1095                1100
4832 Cys Leu Thr Arg Arg Thr Asp Gly Ala Met Gly Phe Ala Ala Phe Asp
4833 1105                1110                1115                1120
4835 Gly Ala Gly Leu Pro Val Leu Thr Ala Glu Ala Val Thr Leu Arg Glu
4836                 1125                1130                1135
4838 Val Ala Ser Pro Ser Gly Ser Glu Glu Ser Asp Gly Leu His Arg Leu
E--> 4839             1140                1145                1150
4841 Glu Trp Leu Ala Val Ala Glu Ala Val Tyr Asp Gly Asp Leu Pro Glu
E--> 4842         1155                1160                1165
4844 Gly His Val Leu Ile Thr Ala Ala His Pro Asp Asp Pro Glu Asp Ile
E--> 4845     1170                1175                1180
4847 Pro Thr Arg Ala His Thr Arg Ala Thr Arg Val Leu Thr Ala Leu Gln
E--> 4848 1185                1190                1195                1200
4850 His His Leu Thr Thr Thr Asp His Thr Leu Ile Val His Thr Thr Thr
E--> 4851                 1205                1210                1215
4853 Asp Pro Ala Gly Ala Thr Val Thr Gly Leu Thr Arg Thr Ala Gln Asn
4854             1220                1225                1230
4856 Glu His Pro His Arg Ile Arg Leu Ile Glu Thr Asp His Pro His Thr
4857         1235                1240                1245
4859 Pro Leu Pro Leu Ala Gln Leu Ala Thr Leu Asp His Pro His Leu Arg
```

Move to the left so that the last digit does not fall below the first letter of the next amino.

- Same

```
4860     1250                1255                1260
4862 Leu Thr His His Thr Leu His His Pro His Leu Thr Pro Leu His Thr
4863 1265                1270                1275                1280
4865 Thr Thr Pro Pro Thr Thr Thr Pro Leu Asn Pro Glu His Ala Ile Ile
4866                 1285                1290                1295
4868 Ile Thr Gly Gly Ser Gly Thr Leu Ala Gly Ile Leu Ala Arg His Leu
4869             1300                1305                1310
4871 Asn His Pro His Thr Tyr Leu Leu Ser Arg Thr Pro Pro Pro Asp Ala
4872         1315                1320                1325
4874 Thr Pro Gly Thr His Leu Pro Cys Asp Val Gly Asp Pro His Gln Leu
4875     1330                1335                1340
4877 Ala Thr Thr Leu Thr His Ile Pro Gln Pro Leu Thr Ala Ile Phe His
4878 1345                1350                1355                1360
4880 Thr Ala Ala Thr Leu Asp Asp Gly Ile Leu His Ala Leu Thr Pro Asp
4881                 1365                1370                1375
4883 Arg Leu Thr Thr Val Leu His Pro Lys Ala Asn Ala Ala Trp His Leu
4884             1380                1385                1390
4886 His His Leu Thr Gln Asn Gln Pro Leu Thr His Phe Val Leu Tyr Ser
4887         1395                1400                1405
4889 Ser Ala Ala Ala Val Leu Gly Ser Pro Gly Gln Gly Asn Tyr Ala Ala
4890     1410                1415                1420
4892 Ala Asn Ala Phe Leu Asp Ala Leu Ala Thr His Arg His Thr Leu Gly
4893 1425                1430                1435                1440
4895 Gln Pro Ala Thr Ser Ile Ala Trp Gly Met Trp His Thr Thr Ser Thr
4896                 1445                1450                1455
4898 Leu Thr Gly Gln Leu Asp Asp Ala Asp Arg Asp Arg Ile Arg Arg Gly
4899             1460                1465                1470
4901 Gly Phe Leu Pro Ile Thr Asp Asp Glu Gly
4902         1475                1480
6722 <210> SEQ ID NO: 27
6723 <211> LENGTH: 1557
6724 <212> TYPE: PRT
6725 <213> ORGANISM: Artificial Sequence
6727 <220> FEATURE:
6728 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic PKS
6729       synthase fragment
6731 <400> SEQUENCE: 27
6732 Met Arg Leu Tyr Glu Ala Ala Arg Arg Thr Gly Ser Pro Val Val Val
6733   1               5                  10                  15
6735 Ala Ala Ala Leu Asp Asp Ala Pro Asp Val Pro Leu Leu Arg Gly Leu
6736              20                  25                  30
6738 Arg Arg Thr Thr Val Arg Arg Ala Ala Val Arg Glu Arg Ser Leu Ala
6739          35                  40                  45
6741 Asp Arg Ser Pro Cys Cys Pro Thr Thr Ser Ala Pro Thr Pro Pro Ser
6742      50                  55                  60
6744 Arg Ser Ser Trp Asn Ser Thr Ala Thr Val Leu Gly His Leu Gly Ala
6745  65                  70                  75                  80
6747 Glu Asp Ile Pro Ala Thr Thr Thr Phe Lys Glu Leu Gly Ile Asp Ser
6748                  85                  90                  95
```

RAW SEQUENCE LISTING DATE: 02/13/2003
PATENT APPLICATION: **US/09/940,316B** TIME: 13:57:40

Input Set : **D:\30062-20026.txt**
Output Set: **N:\CRF4\02132003\I940316B.raw**

```
6970 1265                 1270                 1275                 1280
6972 Val His Thr Thr Thr Asp Pro Pro Gly Ala Ala Val Thr Gly Leu Thr
6973                 1285                 1290                 1295
6975 Arg Thr Ala Gln Asn Glu His Pro Gly Arg Ile His Leu Ile Glu Thr
6976             1300                 1305                 1310
6978 His His Pro His Thr Pro Leu Pro Leu Thr Gln Leu Thr Thr Leu His
6979         1315                 1320                 1325
6981 Gln Pro His Leu Arg Leu Thr Asn Asn Thr Leu His Thr Pro His Leu
6982     1330                 1335                 1340
6984 Thr Pro Ile Thr Thr His His Asn Thr Thr Thr Thr Thr Pro Asn Thr
6985 1345                 1350                 1355                 1360
6987 Pro Pro Leu Asn Pro Asn His Ala Ile Leu Ile Thr Gly Gly Ser Gly
6988                 1365                 1370                 1375
6990 Thr Leu Ala Gly Ile Leu Ala Arg His Leu Asn His Pro His Thr Tyr
6991             1380                 1385                 1390
6993 Leu Leu Ser Arg Thr Pro Pro Pro Pro Thr Thr Pro Gly Thr His Ile
6994         1395                 1400                 1405
6996 Pro Cys Asp Leu Thr Asp Pro Thr Gln Ile Thr Gln Ala Leu Thr His
6997     1410                 1415                 1420
6999 Ile Pro Gln Pro Leu Thr Gly Ile Phe His Thr Ala Ala Thr Leu Asp
E--> 7000 1425                 1430                 1435                 1440
7002 Asp Ala Thr Leu Thr Asn Leu Thr Pro Gln His Leu Thr Thr Thr Leu
7003                 1445                 1450                 1455
7005 Gln Pro Lys Ala Asp Ala Ala Trp His Leu His His His Thr Gln Asn
7006             1460                 1465                 1470
7008 Gln Pro Leu Thr His Phe Val Leu Tyr Ser Ser Ala Ala Ala Thr Leu
7009         1475                 1480                 1485
7011 Gly Ser Pro Gly Gln Ala Asn Tyr Ala Ala Ala Asn Ala Phe Leu Asp
7012     1490                 1495                 1500
7014 Ala Leu Ala Thr His Arg His Thr Gln Gly Gln Pro Ala Thr Thr Ile
7015 1505                 1510                 1515                 1520
7017 Ala Trp Gly Met Trp His Thr Thr Thr Thr Leu Thr Ser Gln Leu Thr
7018                 1525                 1530                 1535
7020 Asp Ser Asp Arg Asp Arg Ile Arg Arg Gly Gly Phe Leu Pro Ile Ser
7021             1540                 1545                 1550
7023 Asp Asp Glu Gly Met
7024         1555
8164 <210> SEQ ID NO: 31
8165 <211> LENGTH: 1578
8166 <212> TYPE: PRT
8167 <213> ORGANISM: Artificial Sequence
8169 <220> FEATURE:
8170 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic PKS
8171       synthase fragment
8173 <400> SEQUENCE: 31
8174 Met Arg Leu Tyr Glu Ala Ala Arg Arg Thr Gly Ser Pro Val Val Val
8175   1               5                  10                  15
8177 Ala Ala Ala Leu Asp Asp Ala Pro Asp Val Pro Leu Leu Arg Gly Leu
8178              20                  25                  30
```

RAW SEQUENCE LISTING DATE: 02/13/2003
PATENT APPLICATION: **US/09/940,316B** TIME: 13:57:40

Input Set : **D:\30062-20026.txt**
Output Set: **N:\CRF4\02132003\I940316B.raw**

```
8400                1205                1210                1215
8402 Gly Glu Val Ala Ser Ala Gly Gly Ser Asp Glu Ser Asp Gly Leu Leu
8403            1220                1225                1230
8405 Arg Leu Glu Trp Leu Pro Val Ala Glu Ala His Tyr Asp Gly Ala Asp
8406        1235                1240                1245
8408 Glu Leu Pro Glu Gly Tyr Thr Leu Ile Thr Ala Thr His Pro Asp Asp
8409    1250                1255                1260
8411 Pro Asp Asp Pro Thr Asn Pro His Asn Thr Pro Thr Arg Thr His Thr
8412 1265                1270                1275                1280
8414 Gln Thr Thr Arg Val Leu Thr Ala Leu Gln His His Leu Ile Thr Thr
8415                1285                1290                1295
8417 Asn His Thr Leu Ile Val His Thr Thr Thr Asp Pro Pro Gly Ala Ala
8418            1300                1305                1310
8420 Val Thr Gly Leu Thr Arg Thr Ala Gln Asn Glu His Pro Gly Arg Ile
8421        1315                1320                1325
8423 His Leu Ile Glu Thr His His Pro His Thr Pro Leu Pro Leu Thr Gln
8424    1330                1335                1340
8426 Leu Thr Thr Leu His Gln Pro His Leu Arg Leu Thr Asn Asn Thr Leu
8427 1345                1350                1355                1360
8429 His Thr Pro His Leu Thr Pro Ile Thr Thr His His Asn Thr Thr Thr
8430                1365                1370                1375
8432 Thr Thr Pro Asn Thr Pro Pro Leu Asn Pro Asn His Ala Ile Leu Ile
8433            1380                1385                1390
8435 Thr Gly Gly Ser Gly Thr Leu Ala Gly Ile Leu Ala Arg His Leu Asn
8436        1395                1400                1405
8438 His Pro His Thr Tyr Leu Leu Ser Arg Thr Pro Pro Pro Pro Thr Thr
8439    1410                1415                1420
8441 Pro Gly Thr His Ile Pro Cys Asp Leu Thr Asp Pro Thr Gln Ile Thr
8442 1425                1430                1435                1440
8444 Gln Ala Leu Thr His Ile Pro Gln Pro Leu Thr Gly Ile Phe His Thr
8445                1445                1450                1455
8447 Ala Ala Thr Leu Asp Asp Ala Thr Leu Thr Asn Leu Thr Pro Gln His
8448            1460                1465                1470
8450 Leu Thr Thr Thr Leu Gln Pro Lys Ala Asp Ala Ala Trp His Leu His
8451        1475                1480                1485
8453 His His Thr Gln Asn Gln Pro Leu Thr His Phe Val Leu Tyr Ser Ser
8454    1490                1495                1500
8456 Ala Ala Ala Thr Leu Gly Ser Pro Gly Gln Ala Asn Tyr Ala Ala Ala
8457 1505                1510                1515                1520
8459 Asn Ala Phe Leu Asp Ala Leu Ala Thr His Arg His Thr Gln Gly Gln
8460                1525                1530                1535
8462 Pro Ala Thr Thr Ile Ala Trp Gly Met Trp His Thr Thr Thr Thr Leu
E--> 8463            ←1540               ←1545               ←1550
8465 Thr Ser Gln Leu Thr Asp Ser Asp Arg Asp Arg Ile Arg Arg Gly Gly
8466        1555                1560                1565
8468 Phe Leu Pro Ile Ser Asp Asp Glu Gly Met
8469    1570                1575
8891 <210> SEQ ID NO: 33
8892 <211> LENGTH: 1605
```

— same error

RAW SEQUENCE LISTING DATE: 02/13/2003
PATENT APPLICATION: **US/09/940,316B** TIME: 13:57:40

Input Set : **D:\30062-20026.txt**
Output Set: **N:\CRF4\02132003\I940316B.raw**

8893 <212> TYPE: PRT
8894 <213> ORGANISM: Artificial Sequence
8896 <220> FEATURE:
8897 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic PKS
8898 synthase fragment
8900 <400> SEQUENCE: 33
8901 Met Arg Leu Tyr Glu Ala Ala Arg Arg Thr Gly Ser Pro Val Val Val
8902 1 5 10 15
8904 Ala Ala Ala Leu Asp Asp Ala Pro Asp Val Pro Leu Leu Arg Gly Leu
8905 20 25 30
8907 Arg Arg Thr Thr Val Arg Arg Ala Ala Val Arg Glu Arg Ser Leu Ala
8908 35 40 45
8910 Asp Arg Ser Pro Cys Cys Pro Thr Thr Ser Ala Pro Thr Pro Pro Ser
8911 50 55 60
8913 Arg Ser Ser Trp Asn Ser Thr Ala Thr Val Leu Gly His Leu Gly Ala
8914 65 70 75 80
8916 Glu Asp Ile Pro Ala Thr Thr Thr Phe Lys Glu Leu Gly Ile Asp Ser
8917 85 90 95
8919 Leu Thr Ala Val Gln Leu Arg Asn Ala Leu Thr Thr Ala Thr Gly Val
8920 100 105 110
8922 Arg Leu Asn Ala Thr Ala Val Phe Asp Phe Pro Thr Pro Arg Ala Leu
8923 115 120 125
8925 Ala Ala Arg Leu Gly Asp Glu Leu Ala Gly Thr Arg Ala Pro Val Ala
8926 130 135 140
8928 Ala Arg Thr Ala Ala Thr Ala Ala Ala His Asp Glu Pro Leu Ala Ile
8929 145 150 155 160
8931 Val Gly Met Ala Cys Arg Leu Pro Gly Gly Val Ala Ser Pro Gln Glu
8932 165 170 175
8934 Leu Trp Arg Leu Val Ala Ser Gly Thr Asp Ala Ile Thr Glu Phe Pro
8935 180 185 190
8937 Ala Asp Arg Gly Trp Asp Val Asp Ala Leu Tyr Asp Pro Asp Pro Asp
8938 195 200 205
8940 Ala Ile Gly Lys Thr Phe Val Arg His Gly Gly Phe Leu Asp Gly Ala
8941 210 215 220
8943 Thr Gly Phe Asp Ala Ala Phe Phe Gly Ile Ser Pro Arg Glu Ala Leu
8944 225 230 235 240
8946 Ala Met Asp Pro Gln Gln Arg Val Leu Leu Glu Thr Ser Trp Glu Ala
8947 245 250 255
8949 Phe Glu Ser Ala Gly Ile Thr Pro Asp Ala Ala Arg Gly Ser Asp Thr
8950 260 265 270
8952 Gly Val Phe Ile Gly Ala Phe Ser Tyr Gly Tyr Gly Thr Gly Ala Asp
8953 275 280 285
8955 Thr Asn Gly Phe Gly Ala Thr Gly Ser Gln Thr Ser Val Leu Ser Gly
8956 290 295 300
8958 Arg Leu Ser Tyr Phe Tyr Gly Leu Glu Gly Pro Ser Val Thr Val Asp
8959 305 310 315 320
8961 Thr Ala Cys Ser Ser Ser Leu Val Ala Leu His Gln Ala Gly Gln Ser
8962 325 330 335
8964 Leu Arg Ser Gly Glu Cys Ser Leu Ala Leu Val Gly Gly Val Thr Val

RAW SEQUENCE LISTING DATE: 02/13/2003
PATENT APPLICATION: **US/09/940,316B** TIME: 13:57:40

Input Set : **D:\30062-20026.txt**
Output Set: **N:\CRF4\02132003\I940316B.raw**

amino numbering misaligned — Same

```
     9186 Gln Pro Leu Thr His Phe Val Leu Tyr Ser Ser Ala Ala Ala Thr Leu
     9187                 1525                1530                1535
     9189 Gly Ser Pro Gly Gln Ala Asn Tyr Ala Ala Ala Asn Ala Phe Leu Asp
     9190             1540                1545                1550
     9192 Ala Leu Ala Thr His Arg His Thr Gln Gly Gln Pro Ala Thr Thr Ile
E--> 9193         <--1555             <--1560             <--1565
     9195 Ala Trp Gly Met Trp His Thr Thr Thr Thr Leu Thr Ser Gln Leu Thr
E--> 9196     1570                1575                1580
     9198 Asp Ser Asp Arg Asp Arg Ile Arg Arg Gly Gly Phe Leu Pro Ile Ser
E--> 9199 1585                1590                1595                1600
     9201 Asp Asp Glu Gly Met
E--> 9202                 1605
     9979 <210> SEQ ID NO: 72
     9980 <211> LENGTH: 6396
     9981 <212> TYPE: PRT
     9982 <213> ORGANISM: Streptomyces hygroscopicus
     9984 <400> SEQUENCE: 72
     9985 Met Pro Glu Gln Asp Lys Thr Val Glu Tyr Leu Arg Trp Ala Thr Ala
     9986  1               5                  10                  15
     9987 Glu Leu Gln Lys Thr Arg Ala Glu Leu Ala Ala His Ser Glu Pro Leu
     9988             20                  25                  30
     9989 Ala Ile Val Gly Met Ala Cys Arg Leu Pro Gly Gly Val Ala Ser Pro
     9990         35                  40                  45
     9991 Glu Asp Leu Trp Gln Leu Leu Glu Ser Gly Gly Asp Gly Ile Thr Ala
     9992     50                  55                  60
     9993 Phe Pro Thr Asp Arg Gly Trp Glu Thr Thr Ala Asp Gly Arg Gly Gly
     9994 65                  70                  75                  80
     9995 Phe Leu Thr Gly Ala Ala Gly Phe Asp Ala Ala Phe Phe Gly Ile Ser
     9996                 85                  90                  95
     9997 Pro Arg Glu Ala Leu Ala Met Asp Pro Gln Gln Arg Leu Ala Leu Glu
     9998             100                 105                 110
     9999 Thr Ser Trp Glu Ala Phe Glu His Ala Gly Ile Asp Pro Gln Thr Leu
    10000         115                 120                 125
    10001 Arg Gly Ser Asp Thr Gly Val Phe Leu Gly Ala Phe Phe Gln Gly Tyr
    10002     130                 135                 140
    10003 Gly Ile Gly Ala Asp Phe Asp Gly Tyr Gly Thr Thr Ser Ile His Thr
    10004 145                 150                 155                 160
    10005 Ser Val Leu Ser Gly Arg Leu Ala Tyr Phe Tyr Gly Leu Glu Gly Pro
    10006                 165                 170                 175
    10007 Ala Val Thr Val Asp Thr Ala Cys Ser Ser Ser Leu Val Ala Leu His
    10008             180                 185                 190
    10009 Gln Ala Gly Gln Ser Leu Arg Ser Gly Glu Cys Ser Leu Ala Leu Val
    10010         195                 200                 205
    10011 Gly Gly Val Thr Val Met Ala Ser Pro Ala Gly Phe Ala Asp Phe Ser
    10012     210                 215                 220
    10013 Glu Gln Gly Gly Leu Ala Pro Asp Ala Arg Cys Lys Ala Phe Ala Glu
    10014 225                 230                 235                 240
    10015 Ala Ala Asp Gly Thr Gly Phe Ala Glu Gly Ser Gly Val Leu Ile Val
    10016                 245                 250                 255
```

RAW SEQUENCE LISTING DATE: 02/13/2003
PATENT APPLICATION: US/09/940,316B TIME: 13:57:41

Input Set : D:\30062-20026.txt
Output Set: N:\CRF4\02132003\I940316B.raw

```
10213 Leu Gly His Val Gly Gly Glu Asp Ile Pro Ala Thr Ala Ala Phe Lys
10214 1825                1830                1835                1840
10215 Asp Leu Gly Ile Asp Ser Leu Thr Ala Val Gln Leu Arg Asn Ala Leu
10216                 1845                1850                1855
10217 Thr Glu Ala Thr Gly Val Arg Leu Asn Ala Thr Ala Val Phe Asp Phe
10218             1860                1865                1870
10219 Pro Thr Pro His Val Leu Ala Gly Lys Leu Gly Asp Glu Leu Thr Gly
10220         1875                1880                1885
10221 Thr Arg Ala Pro Val Val Pro Arg Thr Ala Ala Thr Ala Gly Ala His
10222     1890                1895                1900
10223 Asp Glu Pro Leu Ala Ile Val Gly Met Ala Cys Arg Leu Pro Gly Gly
10224 1905                1910                1915                1920
10225 Val Ala Ser Pro Glu Glu Leu Trp His Leu Val Ala Ser Gly Thr Asp
10226                 1925                1930                1935
10227 Ala Ile Thr Glu Phe Pro Thr Asp Arg Gly Trp Asp Val Asp Ala Ile
10228             1940                1945                1950
10229 Tyr Asp Pro Asp Pro Asp Ala Ile Gly Lys Thr Phe Val Arg His Gly
10230         1955                1960                1965
10231 Gly Phe Leu Thr Gly Ala Thr Gly Phe Asp Ala Ala Phe Phe Gly Ile
10232     1970                1975                1980
10233 Ser Pro Arg Glu Ala Leu Ala Met Asp Pro Gln Gln Arg Val Leu Leu
10234 1985                1990                1995                2000
10235 Glu Thr Ser Trp Glu Ala Phe Glu Ser Ala Gly Ile Thr Pro Asp Ser
10236                 2005                2010                2015
10237 Thr Arg Gly Ser Asp Thr Gly Val Phe Val Gly Ala Phe Ser Tyr Gly
10238             2020                2025                2030
10239 Tyr Gly Thr Gly Ala Asp Thr Asp Gly Phe Gly Ala Thr Gly Ser Gln
10240         2035                2040                2045
10241 Thr Ser Val Leu Ser Gly Arg Leu Ser Tyr Phe Tyr Gly Leu Glu Gly
10242     2050                2055                2060
10243 Pro Ala Val Thr Val Asp Thr Ala Cys Ser Ser Ser Leu Val Ala Leu
E--> 10244 2065                2070                2075                2080
10245 His Gln Ala Gly Gln Ser Leu Arg Ser Gly Glu Cys Ser Leu Ala Leu
10246                 2085                2090                2095
10247 Val Gly Gly Val Thr Val Met Ala Ser Pro Gly Gly Phe Val Glu Phe
10248             2100                2105                2110
10249 Ser Arg Gln Arg Gly Leu Ala Pro Asp Gly Arg Ala Lys Ala Phe Gly
10250         2115                2120                2125
10251 Ala Gly Ala Asp Gly Thr Ser Phe Ala Glu Gly Ala Gly Val Leu Ile
10252     2130                2135                2140
10253 Val Glu Arg Leu Ser Asp Ala Glu Arg Asn Gly His Thr Val Leu Ala
10254 2145                2150                2155                2160
10255 Val Val Arg Gly Ser Ala Val Asn Gln Asp Gly Ala Ser Asn Gly Leu
10256                 2165                2170                2175
10257 Ser Ala Pro Asn Gly Pro Ser Gln Glu Arg Val Ile Arg Gln Ala Leu
10258             2180                2185                2190
10259 Ala Asn Ala Gly Leu Thr Pro Ala Asp Val Asp Ala Val Glu Ala His
10260         2195                2200                2205
10261 Gly Thr Gly Thr Arg Leu Gly Asp Pro Ile Glu Ala Gln Ala Val Leu
```

add

VERIFICATION SUMMARY DATE: 02/13/2003
PATENT APPLICATION: **US/09/940,316B** TIME: 13:57:42

Input Set : **D:\30062-20026.txt**
Output Set: **N:\CRF4\02132003\I940316B.raw**

L:16 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:2519 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:1
L:4839 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:21
M:332 Repeated in SeqNo=21
L:7000 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:27
L:7351 M:336 W: Invalid Amino Acid Number in Coding Region, SEQ ID:28
L:8463 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:31
L:9193 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:33
M:332 Repeated in SeqNo=33
L:10244 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:72